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Abstract of the Disclosure (amended)

Linear predictive system with classification of LP residual Fourier coefficients into two or more overlapping classes, and each class has its own vector quantization codebook(s). The use of strong and weak predictors minimizes codebook size by only quantizing the difference between Fourier coefficients of a frame and the Fourier coefficients predicted from a prior frame. The choice of using either a strong or weak predictor adapts to the prior choice of predictor so that a strong predictor following a weak predictor is changed to a weak predictor to insure attenuation of error propagation as arise from frame erasures.

In the claims

- 1. An encoding method using strong and weak predictors, comprising the step of:
 - (a) replace a strong predictor following a weak predictor with a weak predictor.
- 2. The method of claim 1, wherein:
- (a) said strong predictor and said weak predictor predict the Fourier coefficients for the pitch harmonics.
- 3. The method of claim 2, wherein:
- (a) said strong predictor equals a multiple of the Fourier coefficients of a prior frame with the multiple in the range of 0.7 to 1.0; and
- (b) said weak predictor equals a second multipler of the Fourier coefficients of said prior frame with said second multipler in the range of 0.0 to 0.3.
- 4. The method of claim 1, wherein:
- (a) said step (a) of claim 1 replaces a second successive strong predictor with a corresponding second weak predictor.

